Vol. 5, No. 2

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May, 1954

SYSTEMS AND PROCEDURES QUARTERLY

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PUBLISHED BY THE SYSTEMS AND PROCEDURES ASSOCIATION OF AMERICA

SPA Quarterly

Official Journal of the

Systems and Procedures Association of America

May 1954

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The Quarterly is published by the Systems and Procedures Association of America, 330 W. 42nd St., New York 36. Yearly subscription rate $3.75, single copies $1.

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Systems English—

Let's Keep It Simple

by Leslie Matthies

UNDERSTANDING is a prime watchword for the systems analyst to keep before him, always. And the proper use of basic English in all phases of the systems job will be most rewarding.

IT IS evident to most of us working systems men that our field—the field of systems and procedures—is about to come into its own. Five to ten years from now the profession of systems should be known and reasonably appreciated by organizations the world over.

But the rate of our coming into professionalism depends upon many factors. Not the least of these factors is the manner in which we express ourselves—how clear we make our thoughts to the men and women who work with us.

How readable can we make our procedures? How clear and precise can we make our form captions? How effective can we make reports? How resultful can our proposals be? I don't think any sensible man or woman will dispute the importance of being understood.

For over a year we collected examples of procedures and forms from all over the country. As we studied these samples, we asked: How well is the systems man doing in the art of being understood? My own 4 year experience of teaching a course in "The English of Business" at Los Angeles City College enabled me to look over the fence and see what was happening in other fields of business writing. This experience made it possible to lay down a reasonable yardstick alongside the English systems samples.

Now it's nice to be complimentary, but it's dangerous to flatter. People don't make progress if they are satisfied. So let's look at Systems English in the spirit of a workshop group. From the cross section of samples we studied, systems expression, on the average, is years behind the field of correspondence, for instance. There were outstanding exceptions in the samples, of course, but the exceptions alone can't carry the entire systems field.

I am not quite sure why, but many professional people love to adopt a mystifying jargon to confuse the layman. A doctor, or some other individual who depends on his personal effort, can continue to use a confusing mess of language that no one else understands and get away with it—as long as he gets results.

This is not true of systems men, accountants, industrial engineers, and others who must sell their services to other people on a continuing basis. Management must understand us, and it is a certainty that unless the operators of our system can understand us, our system cannot succeed.

Psychologists have proven again and again that we cannot be objective about ourselves. We cannot see ourselves as others see us. This is also true of our writing. What we write seems clear to us, yet sometimes it is not at all clear to the man reading it.

One of the best ways to make you dissatisfied is to let you see the other fellow making strides and leaving you behind. So for the moment, let's climb up and look over the fence into other fields of business writing.

Consider the field of business correspondence. Companies like New York Life Insurance are retaining highly paid consultants to improve the letter writing techniques of their correspondents. If this work is paying off for them and since these people are spending millions to improve their writing, wouldn't it be smart for us to tune in on their findings to see what we can use in systems work?

For generations a publisher named Haldeman-Julius has been selling a line of booklets, known as the "Little Blue Books", that sell for 10c each. He advertises in

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MR. MATTHIES is general supervisor of administrative services, Northrop Aircraft, Inc., Anaheim, Calif. Active in SPA work on the West Coast, Mr. Matthies gave this paper at the Los Angeles convention last year.

magazines, Sunday supplements, and newspapers and offers over 1500 different books listed by title only. If sales are under 10,000 annually on any one book, Haldeman-Julius experiments to determine the appeal of a changed title. The results in sales are sometimes surprising, yet he changes only the title. Here's a concrete example of the power of words.

The title of one book was "Fleece of Gold", and sales averaged 6000 copies a year. Haldeman-Julius changed the title to "Quest For A Blonde Mistress" and the very next year sold 50,000 copies. Another example. As the "Art of Controversy" one book sold only a few hundred copies. The publisher sent it to his editorial hospital, and it came back with the title "How To Argue Logically". The next year sales went from almost nothing to over 30,000. Mind you, the text was unchanged!

The Power of Words

In the past 20 years a number of writers and researchers have been inquiring into the power of, or sometimes the lack of power, of certain words. Stuart Chase, after years of successful writing in the field of popular economics, wrote his book "The Tyranny of Words". Chase points out how by mere words people can be incited to riot, to work harder, to kill, to cry, to hate. People are actually ruled and motivated by words.

More recently an unknown word researcher named Rudolph Flesch wrote a thesis as one of the requirements for securing his doctor's degree. He called his paper "Marks of a Readable Style". However, the manner in which he expressed himself in his thesis was such that he certainly wasn't practicing what he preached! After he received his degree he woke up to the need for revising his thesis paper.

So he merely applied the advice he advocated to the thesis itself. The result was a book that has and is continuing to have powerful influence on the field of improvement in writing. Flesch called it "The Art Of Plain Talk". Don't miss this book. If you haven't read it yet you have missed one of the most important contributions to the art of expression. By using the truths discovered in his own research, Dr. Flesch was able to alter his own original stodgy style to one of outstanding readability!

Writing authorities credit Dr. Flesch with some of the most effective writing research to date. His book contains a simple formula that can be applied to your writing, my writing, anybody's writing. With Flesch's formula it's easy to rate any passage on "readability". The good doctor's recipe shows that readability ranges from the rating "very easy", through seven stages to "very difficult". An example of writing that is "very easy" are the captions in a comic book. Next up the scale is "easy", such as the writing you find in a "pulp paper" magazine—*Western Story*, etc.

Dr. Flesch rates *Reader's Digest* articles as standard. Quality magazines (*Atlantic Monthly*) are "fairly difficult" and academic formulas are "difficult". Scientific or professional writing is "very difficult". This last writing is so highly technical that the average layman cannot understand it. Sometimes even the practitioner has to do a lot of mental pushing to get the full meaning of the passage.

It was Flesch's formula that gave the dramatic spark that was needed to make business people realize that difficult writing was failing to put over ideas. Some years back, I applied Dr. Flesch's readability formula to some technical writing of which I was very proud. I was shocked to come up with the rating of "fairly difficult". Somewhere along the line I'd picked up some bad writing habits. But it was reassuring to know that, after working over the copy as suggested, I again applied the formula and came up with a rating that was between "average" and "fairly easy".

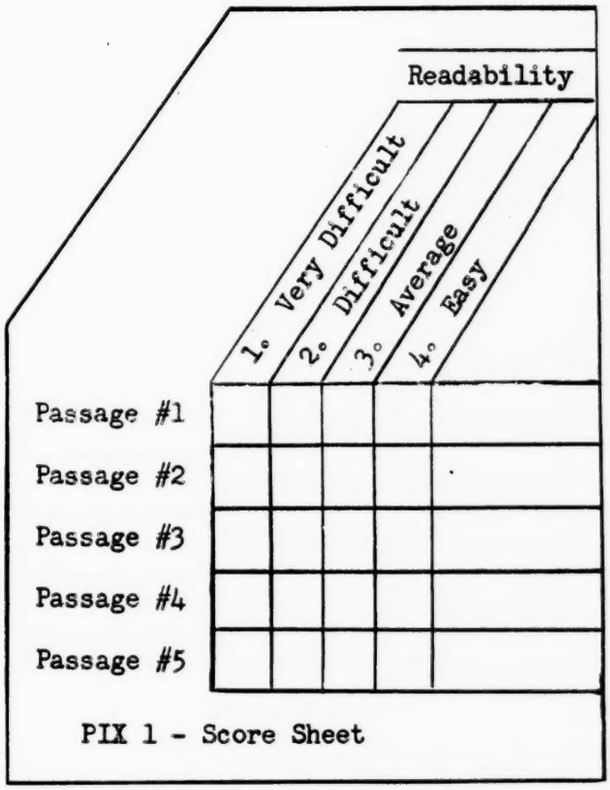
Why do you write? What is your objective? Aren't you trying to convey a thought from your mind to the mind of another man? Usually you create a certain amount of "friction" in your transmission process. These friction losses cut down the clarity of your reader's reception. Your meaning is out-of-focus, obscure, or downright misleading.

So let's tear some writing apart and see why it ticks or doesn't tick. Let's use four ratings to analyze the transmission of meaning for you. Be entirely objective. If you can't understand, indicate that you can't. Across the top of the card you will note that we have spaces to check. These are the 4 categories we want your rating on.

1. Very difficult—can't understand at all.
2. Difficult, but can understand.
3. Average—Can understand.
4. Easy—Can understand without effort.

Passage No. 1 — Cleaning an unmounted lens

1. First take the meat skewer stick and dip the pointed end about ¾" deep in orvus solution.
2. Then wind a small amount of cotton around the stick, dip the tip of the cotton into the cleaning solution and lay the prepared stick across top of the bottle.
3. Next place diaper cloth on lap noting which side is up (the hemmed side up or down). This is important as in handling it our hands should be always on the underside of the cloth, away from the optics. By always using one side of the cloth we avoid smears on our optics which would be caused by oil from the skin of our hands.
4. Pick up our lens at the edges between thumb and index finger of our left hand, apply some orvus solution with our cotton stick, using cir-



PIX 1 - Score Sheet

cular motions from center of lens toward outside edge.

Now indicate how you rate passage No. 1 on the chart.

Passage No. 2 —"Procedure Reminder"

"The referenced procedure places the responsibility upon the requesting department to completely justify the necessity for additional equipment and/or facilities. In order to assist the requesting departments, a form, "Facilities Request", No. 347, has been made available to all departments and if this form is completely filled out it will not only comply with Standard Instruction No. 74, but will greatly facilitate the review and, in case of need, the acquisition of the required items. At the present time many requests are coming to Facilities Engineering by memo, verbally, and on other forms that are either incomplete or inaccurate. A careful use of Form 347 will react to the benefit of both the requestor and to the Company. As a further aid if the requestor will send two copies of Form 347 to Facilities Engineering, one copy will be returned to him with the assigned Job Number and preliminary action indicated, which will give the requestor quickly a status of his request and also will serve as a ready reference file."

Rate passage No. 2 then try passage No. 3:

Passage No. 3 —"Procedural Advice"

"We now come to the question of the point at which the functions of forms arise or are fulfilled. Modern business enterprise is by no means unicellular. It represents not only horizontal and perpendicular integration but various highly specialized units of the same business as well as equally intricate relationships with correspondents or contractors which function in effect as an integral part of the total business organism."

If you've rated passage No. 3, try No. 4:

"It is, of course, vital to clarity that the level and context of discourse be kept clear. I shall therefore attempt, when a complex great-group, a "society" is in question, to distinguish the specific Law and Law-stuff of the Whole from the specific by-law and by-law stuff of any designated sub-grouping within the whole. It is in light of the functional similarity that the institutional differences and the conflicts gain clarity. The uncapitalized phrasings, "legal" and "law-job" and "law-way", I reserve for general applicability to the functional aspects common to groups of all kinds and sizes."

Rate No. 4, and go on to passage No. 5:

"Frank B. Gilbreth, in his early work in motion study, developed certain subdivisions or events which he thought common to all kinds of manual work. He coined the word "Therblig" (Gilbreth spelled backwards) in order to have a short word with which to refer to any of these seventeen elementary subdivisions of a cycle of motions.

Although these seventeen therbligs are not all pure or fundamental elements in the sense that they cannot be further sub-divided, they are the best classification of hand motions that we have."

Rate that one, passage 5, and try one more—passage No. 6:

"Para transmitir una idea de una mente a la otra, las dos tienen que entender los simbolos comunes."

Rate passage No. 6 on your chart. Now study the chart and compare your rate for each passage. At your leisure you may rewrite these passages in order to make them all easy to read and understand.

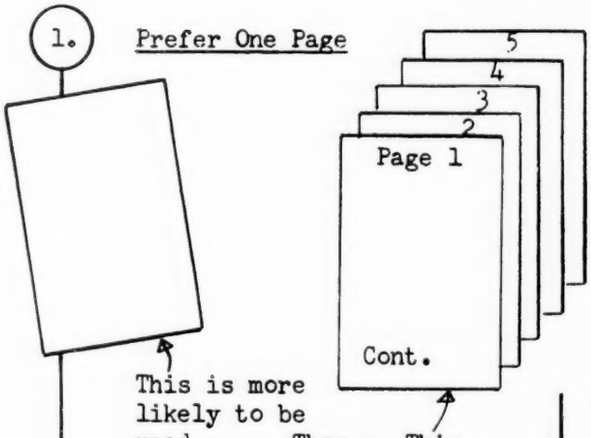
How would your writing be rated. Since your work comes out as a procedure, a printed form, a job instruction, a policy statement—or possibly as a proposal, can you afford to be hard-to-understand?

If you are satisfied that your writing is perfectly clear to everyone, the things we will discuss from here on in this section will do you little good. And this point is very important. As long as you take it for granted that your writing is going over, you are not interested in improving it. Check into it. Apply Dr. Flesch's formulas. Question the people who read your stuff. Possibly you will be shocked to learn the truth.

However, once you are dissatisfied, you will ask "How Can I Improve?" (*Continued on Page 7*)

Technical Aids To Reduce Friction Losses in Transmission of Ideas.

1. Prefer One Page



This is more likely to be read -- Than -- This

2. Position On Page Is Important

3. Long Lines Are Hard To Read; Short Lines Are Easier.

Short Lines

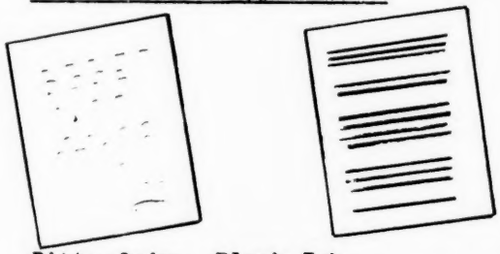
Upon proper authoritative request, Production Engineering furnishes tool or liaison engineering services to Materiel representatives or to the vendor.

Easy-to-read newspapers use columns only two inches long.

Long Lines

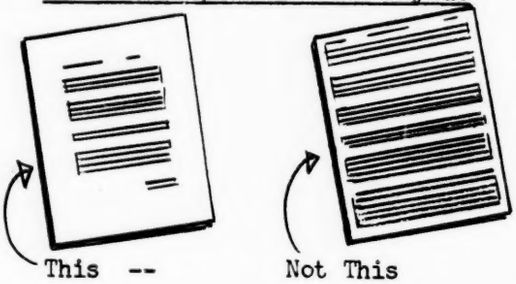
Upon proper authoritative request, Production Engineering furnishes tool or liaison engineering services to Materiel representatives, or to the vendor.

4. Prefer Black Copy to Blue



Ditto fades Black Ink -- Mimeo or Multilith

5. Use White Space In Your Layout



This -- Not This

Make Your copy say "Come In".

6. The Dewey Decimal Shudders

S-h-u-d-d-e-r-s

37.1

372.1

372.18

372.182

372.182-3-Brrhh!

Researchers found that the average person doesn't like to read anything with numerical indices.

Writing is a habit—a habit that has taken 10, 20 or 30 years to form. If you want to change that habit, do not expect miracles overnight, but change you can. Find out where you stand. Get Flesch's book and use his formula on your own writing. After a reasonable amount of analysis you will find a number of things you'll want to improve. They can't all be changed at once, but you can do as Benjamin Franklin did when he decided to improve his personal habits.

In his early youth Ben was a pretty disliked individual—cocky, over-confident and quick with criticism that was very irritating to his friends. But America's wisest man decided to improve his character, so he first determined what was wrong. Next he listed 13 "Virtues" on which he wanted to improve. In his first reform attempt, he tried to observe all of these virtues at once. But he soon realized that he was getting nowhere. There was too much to watch for. So Ben decided that on each week he would concentrate on just one of the virtues. He didn't overlook the other elements he was trying to change, but he gave them much less attention. On the next week he concentrated on the second trait, but wouldn't completely overlook the factor that he had concentrated on the week before. In 13 weeks Ben was able to concentrate on one element each week.

It is a matter of history that Ben Franklin's technique, and based on his *will to improve*, had tremendous effect not only on the man, but on the history of the world.

Using a similar technique in improving your writing, let us say that you tend to use the passive voice too much. For a week, examine your drafts for the passive voice, and change to the active voice. Then proceed on through the other points on which you want improvement. Don't be discouraged. Keep a sample of your present writing, test it thoroughly, and make a list of the faults.

Thirty days from now take another sample of your writing and look for improvement on the four or more points upon which you have concentrated. You will find that you are making progress, even tho' sometimes you will have slipped back into your old habits. Changing writing habits can take from one to three years, depending upon how much writing you do, on how clearly you recognize your own errors, and on how well you apply the advice of the men who are experts in the field.

If you are really trying, at the end of six months you will find definite improvement. At the end of a year your writing should really be able to stand up against the average in business. Possibly it may be considerably above the average. **s/p/a**

Worth Reading

"Bottomless Box Speeds Check Sorting"—A. L. Due, *Management Methods*, December 1953.
Sorting of 2000 checks each month for reconciliation is aided by use of a frame two inches high divided into 10 or 12 sections which keep the piles in neat order. The checks are arranged numerically by sorting four times, starting with the right hand digit and working to the left — sorting into 10 piles for each succeeding digit. Three hours are required for arranging 2000 checks.

"General Electric Installs Electronic Computer for Accounting Operations"—R. F. Osborn, *Management Methods*, February 1954.
General Electric intends to place such functions as payroll, material control, commercial service, and accounting on electronic processing. A Univac is able to turn out a complete payroll for 12000 employees, including paychecks, in six hours. In addition to monetary savings, the burden of administrative detail will be reduced and executive attention can be focused on those areas most in need of it.

"Reducing the Waste of Office Supplies"—Stuart Covington, *The Office*, November 1953.
The key to greater control of office supply costs lies in greater utilization of supplies by employees. Ways to foster increased use are (1) to hold department heads accountable for costs in excess of budgeted amounts (2) establish life-spans for supplies used and (3) restrict requisitioning to needs for short periods.

"A System of Records Management"—Herman Limberg, *The Office*, December 1953.
Presents a detailed plan for installing and operating a comprehensive records management program in large companies. Suggests appointment of a chief records officer with assistants designated in major divisions. Includes samples of directives and requisite forms.

"Montgomery Ward's Clerical Incentive Plan"—Ray Coleman, *Office Executive*, September 1953.
Describes the "measured day" work plan which uses engineered standards in conjunction with an office incentive plan. Five different rates of pay are available to workers on the same job depending on their productivity. Rates are re-evaluated 3 months after hiring and each 6 months thereafter. Claims reduction on labor turnover and savings of 20-40% in each activity for which standards were developed.

"Automatic Accounting Machines"—W. P. Livingston, *Office Management*, January 1954.
Punched card equipment can perform the same operations as electronic machines although not as fast. The major problem in utilization of machines concerns the need for further standardization and simplification of established procedures in order to reduce the effort required to produce the necessary data. Therefore emphasis should be placed on the know how and intelligence of the staff who are relied upon to successfully utilize the performance of the machines now available.

"Mechanized Accounts Payable Saves Diners' Club $15,000 a Year"—Ralph E. Schneider, *Office Management*, January 1954.
One machine handles 3,000 accounts payable. Three basic forms are posted at one time: a voucher record and accounts payable ledger record for each vendor, and a voucher register. The machine also is used to prepare checks for payment to the vendors. The three basic forms are posted at the same time a check is prepared. A total for the voucher register is carried automatically.

Corporate Politics—

A Message for Systems People

by **Harold C. Stott**

CORPORATE Politics is a subject which is very close to my mind and heart, not primarily for personal reasons but close because I sense more and more the supreme significance that this subject has in the lives of all of us engaged in the competitive life of corporate affairs. It has been my consistent view that systems and procedures men represent one of the finest tools of service available to modern management. Modern management, as I know it and experience it, is itself basically a system, a system of live communications and judgments between all of the forces which comprise our entire economy. We know that economy as the American private competitive free enterprise system. This system is, as is any other economic system, a system and a science of human relationships, of the relationships of men with each other and of the relationships of men and things. Wherever there are men in numbers of two or more we have *politics*.

Now, before I proceed further, I want to make quite clear to you that I am deeply conscious of the fact that a person's reaction to any thought depends primarily upon the condition of his mind and spirit at the time that he is exposed to the thought. The Sunday sermon on "fear" finds its keenest response in the minds of those who are fearful; the address on the subject of guilt touches most deeply the minds and the hearts of the guilty. The finest logic and erudition of the Republican finds repulsion in the mind of the Democrat. The training and condition of the listening or reading mind determines the impact that the subject shall have and the twist that it will be subjected to as it falls upon ear or eye.

You will recall that in the Hawthorne experiments at Western Electric Company some fifteen years ago, one of the major findings of those experiments was that *the directives of management, no matter how well intentioned in the interests of the employees of an organization, are almost universally interpreted exactly the opposite by the worker.* To put it another way, if one would liken these thoughts to rays of light, one would envision them as being bent as they passed through a prism, the prism in this case being our individual minds.

If systems-men as individuals are to be happy and successful in their work, their thinking and actions must cut across entire arcs in the entire perspective of human activities, complicated as those activities are in a multitude of conflicting conditions, each having its effect in some way on every mind. It is because I sense the enormity of tangled conflicting forces in which systems and procedures men operate that I am deeply concerned lest I fail to present a complete picture. But there are only two alternatives: to approach the matter fearfully and negatively, or to approach it boldly on a positive basis!

I have long since learned that the more mature I become in years the less I know about more and more. The longer a man lives at ground level the more thoroughly acquainted he becomes with all that he can reach and see about him, for this is limited to a very small area. But when he begins to rise vertically his vision can encompass much more until finally when he reaches the highest point of his ascent, he finds that he can see a far distant horizon and he is aware that his sight no longer encompasses the whole, that what he knew so thoroughly before in a small area is insignificant in relation to the vast expanse now before him. How true it is then that the older one gets the less and less he knows about more and more in proportion, for his mental scope has increased. To an infinite number of minds this startling realization is cause to come back

"POLITICS makes for happy successes . . . causes actual death . . . so powerful it is. Truly, we had better learn about it—learn to use it—to recognize it—direct it—to organize it."

down and to limit oneself to areas in which one is at home. But to the aggressive, dynamic, and responsive mind there comes at once a challenge to greater thought, to broader thinking, to deeper inquiry, to greater intensity of effort and always with good intent.

In every thinking personality it is a truism that well-reasoned and well-conceived ideas ultimately project themselves into appropriate actions and reactions. To put it another way, to think clearly and logically and comprehensively is to ultimately "do". This is what the philosophers call the "law of consequence", for surely the consequence of sound thought and conclusion is to apply it in action. To quote from Emerson and his essay on the Intellect, he states, "*The ray of light passes invisible through space, and only when it falls on an object is it seen.*" In our thinking I hope we shall project some thoughts equivalent to Emerson's rays of light, and if we do so it will be with the complete awareness that such thinking and such thoughts will neither be seen, nor heard, nor effective unless they fall upon minds to carry them into action. *To think and not to act is to have performed man's hardest work in vain. In this life it is the extent to which we apply the skillful processes of our thoughts which determines our place in the schemes of living men,* and it is in these schemes of living men, that we find our subject "Corporate Politics".

Now I am deeply sensitive to the fact that at this point we run into certain danger in this process of thinking together about so broad and so extensive a matter. To pursue any broad avenue of mind or physical action involves the process of choice. To choose in any situation requires first that the elements of choice be sufficiently few in number as to permit the careful analysis of alternatives by the chooser. One at sea in a fog without instruments is without choice of direction, for he has no alternatives by which to measure his choice. Yet all of us know the law of natural phenomena that simplicity undergirds any and every degree of complexity. But simplicity requires complete understanding of the complex in order that one might sift through the complexities to the basic fundamentals. For example, in the physical science of chemistry, *there are only 14 basic elements!* Only 14 basic elements! That statement alone reduces chemistry to a simplicity of beginning for the student chemist and makes his approach to this fabulous science not only possible but practical. Knute Rockne, the most famous of football coaches, taught four simple fundamentals. While other competing coaches dreamed up trick plays, hidden ball tactics and sleight-of-hand artistry, Rockne taught (1) blocking, (2) tackling, (3) kicking, and (4) ball handling. Rockne became the greatest in his field for all time and he did it with this simplicity of approach.

Man cannot exist alone. The bi-sexual nature of his being requires numbers in excess of one for regeneration. At birth he must be cared for by others. He cannot survive alone. Our *first fundamental* then simply stated is this: man must live with others! He must live with his fellow men if he is to live at all. The work you and I do is with and for our fellow men and in greater measure for them than for ourselves. All of us run into countless and immeasurable problems, serious problems to each one of us, just for the reason that we must live and work with others.

Man Must Compete

The *second fundamental* which we must consider is that man by his nature is competitive; and that under different economic systems devised for his progressive well-being man must compete with his fellow man in varying degrees of intensity. Our American private competitive free enterprise system is basically a system of intensive competition. For the individual to develop and grow and attain ever larger degrees of success under our American system is to learn more and to compete in "doing" with the utmost effectiveness. This struggle for life in the economic sense is the term we know so well as Americans—competition! The will to compete exists in virtually every adult of sound mind and of whatever status; to compete for a measure of self-respect; to compete for the respect of one's fellows; to compete for the position of power and rule, for material goods, for the place at the head of the table as it were.

The *third fundamental* in our approach is that *wherever there are more than two civilized human beings*

MR. STOTT is vice-president and treasurer of Albert M. Greenfield & Co., Philadelphia. His paper was given before the Keystone Chapter, SPA, in Philadelphia last year.

engaged in competitive economic activity or even in competitive social activity there you will find politics at work. Interestingly enough when Charles II made his land grant to William Penn, the latter proceeded to organize an expedition to settle it, and one of the very first things that he did was to prepare, with the assistance of his deputy, the so-called First Frame of Government. William Penn, himself a man of the deepest religious convictions recognized from the practical point of view that no matter how good men are in their minds and conscience, that wherever there are more than two of them and wherever property and material things are involved, a system of protection for themselves and for their property as against each other, as well as against others is a prime requisite. Politics was certain to be as present as the men themselves.

Politics Defined

Always then there is and will be this matter of politics. How is it defined? What is it? In my research on the subject I found this definition which I believe is the simplest and yet the broadest. "*Politics is the theory and practice of obtaining the ends of civil society as perfectly as possible.*" Since our own relationships to our corporations are part of our endeavors to obtain our ends as parts of our "civil society" in as perfect a manner as possible, then clearly our mere entrance onto the corporate scene is to enter at once *the process of corporate politics.* It would be no different, whatever the nature of the contact, whether it be as members of this group, as members of a family group, or as members of a church body, the place of politics is absolute. All of us in one way or another are politicians in the sense of our definition. Yet the politician is defined in no complimentary terms in today's book of reference. Our view point depends upon our state of mind—the actual "refraction of mind". I recall a class in Physics some 30 yrs. ago. The instructor asked many questions on the subject of "friction". As I remember, we defined it and applied it and talked about it in the usual mode of class recitation, and we came to see it as something against which scientists were forever struggling in an effort to lessen it. Finally the instructor asked me, "How would you get out of this room if there were no friction?" I was sorely perplexed. Here was something we wanted to avoid and yet the sudden realization struck me that if we avoided it all of us would be absolutely immobilized. *We could not live!* Friction had not only its draw-backs but it also had its essential indispensability to life. And so it is with politics, corporate or otherwise.

Corporate politics, when not understood, takes a toll in human productivity and suffering of such great measure that we are unable to think in such large terms. Scientists have said that the rodents which inhabit barns, stables and storage places cost the U. S. a minimum of five billion dollars a year by their destruction. Who could estimate the destructive processes and the losses which misunderstood corporate politics brings about? But those losses and destructive forces come about mainly because we do not properly appraise politics, and we do not understand the people who engage in them—indeed ourselves.

The very process of incessant change in every person and therefore in his relationships to every other person is a kind of human friction which makes for negative reactions—bad politics. Emerson in his essay on Compensation puts it this way: "The changes which break up at short intervals the prosperity of men are advertisements of the nature whose law is growth. Every soul is by this intrinsic necessity quitting its whole system of things, its friends, and home, and laws, and faith, as the shell fish crawls out of its beautiful but stony case, because it no longer admits of its growth, and slowly forms a new house. In proportion to the vigor of the individual, these revolutions are frequent, until in some happier mind they are incessant. But to us, in our lapsed estate, resting, not advancing, resisting, not cooperating with the Divine expansion, this growth comes by shocks." Part of this growth "by shocks" is the realization of the absolute essentiality of the existence and practice of human politics as a social force in our relationships one with another.

We Can't All Be Psychiatrists

The harassing problems of making a living, of confining our thoughts and our efforts to earning the material rewards with which to sustain ourselves and our families, estops us from all being psychiatrists, psychologists or social scientists. Nevertheless, in the most practical sense here we are, face to face with the problems of getting that understanding if we are ever to do a top level job for ourselves, for our associates and for our corporations. Can we successfully advise managements? Can we counsel men? Can we rationalize conclusions involving men unless we understand them and their politics? It goes without saying that we try to but we do so with only partial successes and with residual harm and injury. The law of successful survival in any dynamic social activity, is as much against us in this as in any blind step we might take in today's fast moving multiple traffc highways. Virtually every month or so I hear of a close friend past the age of fifty or approaching it, who has just been ousted or who fears he will be ousted from his post by some internal political conflict in his department or in his company, or who has failed of promotion because of politics within, or who has lost a valuable account because of politics. . . . and so goes the condemnation of events and persons, with bitterness and with reprisal.

We should not despair, however. In this very recognition there is a world of good. To quote Emerson again

in his essay on Compensation: "Our strength grows out of our weakness. The indignation which arms itself with secret forces does not awaken until we are pricked and stunned and sorely assailed. . . . When a great man is pushed, tormented, defeated he has a chance to learn something: he has been put on his wits, on his manhood; he has gained facts; learns his ignorance; is cured of the insanity of conceit; has gotten moderate and real skill. The wise man throws himself on the side of his assailants. It is more his interest than it is theirs to find his weak point. . . . In general, every evil to which we do not succumb is a benefactor." There is much strength to be gained then out of this matter of weakness which we think of as harmful and destructive, this matter of corporate politics. Let us have a closer look:

For Good or Evil

Politics is an instrument . . . an implementation; indeed a key instrument. Earlier I referred to my concept that management itself is a system . . . a system of communication between all the forces of production, distribution and consumption and an interpretation of the action and reaction of those forces. Now in that same view corporate politics is a sort of "private wire" network within that broad system of communications. Like every instrument or implement it is a two-edged medium. It can be used for good or for evil; for positive or for negative purposes; to help or to harm; to build or to destroy. It is ever present in mind and action. It is not possible to destroy it. It will operate around you if it doesn't operate through you. It is as real as life itself—you can't avoid it nor can I. Why?

Simply because we are human and therefore emotional creatures. If, as humans, we were exclusively creatures of logic I am sure we could void and avoid politics. But we are not creatures of logic—but of logic and emotion. By study in scientific circles it has been demonstrated that about 90% of all decisions we make are *emotional* in conclusion—only about 10% are conclusions of logic. Politics is the private wire network of emotional usage. Logic says to us, "avoid it, destroy it, ignore it."

We know however that we—each one of us—would find that totally impossible. The same channel of reaction that says to us that personal selling, personal appeals, personal contacts, personal calls are more effective than any impersonal ones, discloses that that medium serves us best in our individual and group purposes. Every effort via rules of seniority, organizational charting, salary regimentation, etc.—all these tend to give greater significance and strength to the private wire network of politics. It is quite clear that we should expect that rather than be startled or disturbed by it.

Every man or woman is a bundle of desires—both positive and negative—both good and not good. Those desires not only vary with each of us in kind and type but also in the relative importance of each single one. To some food and drink outweighs self respect; to most men self respect and the respect of others is paramount; the respect of family may exceed respect of friends and so on. To gain the ends each of us seeks we'll generally use the tools available to us, subject only to moral and religious restraints and disciplines. That which all of us want is almost always within the means or control of some other person or persons. Personal appeals, appeals of relationship, of kindred national origin, of creed, of family, or reciprocal favor are all stronger than any other possible appeals. Such appeals ignore echelons of organization, of authority, of seniority or any other superimposed channels—and they are *real*! They work in both directions—and they are extremely effective. Every one of us uses the medium—yet every one of us resents it—almost hates it when others use it. That is because we haven't looked at the instrument for what it it. It will help us attain any end we have in purpose:

Positive

1) self respect
2) respect of others
3) economic means—($)

or

Negative

1) destroy others' self respect
2) destroy others' mutual respect
3) deny means to others ($)

Politics makes for happy successes—it causes actual death—so powerful it is. Truly we had better learn about it—learn to use it—to recognize it—to direct it—to organize it. Politics is the key to organization, to cooperation within organization, to the authority that permits organization to function. It is at the very core of our American competitive system insofar as each of us is concerned, because each of us is himself a political center, a political nucleus, simply because we live solely by our relationships with other persons. Thoreau wrote that "the mass of men live lives of desperation". He was right only for one reason—namely the mass of men do not know, have not thought about the fundamentals we are talking about here.

In our own economic lives we persuade ourselves as to our own adaptability, our flexibility, our facility for fitting into any and every situation which confronts us, and we say that's enough to know or to experience. How wrong can we be!

We have the responsibility of getting across our thoughts and our programs to our fellow man in such a way that he will understand, accept and use our thoughts. And by further study we find it makes a great difference in our success in doing this—to know what his family life is like, what his health and physical condi-

(*Continued on Page 22*)

Manuals for Business

by John W. Hulen

WHILE the following historically famous instructions are not known to the world as procedure manuals, they served the purpose of instructions to countless numbers in matters vital to them, not as laws necessarily, but as customs in which they had to be fully instructed:

The Egyptian Book of the Dead 3000 (?) B. C.
The Code of Hammurabi, King of Babylon, 23rd Century B. C.
The Ten Commandments
The Bible
The Koran

Procedure manuals of various kinds exist outside of business and come within the experience of most of us. Consider the Standard Operating Procedures of the Army and the Navy: the car owner's manual provided with most cars and how-to-do-it books galore, from how to bake a cake to "How to Shrink a Human Head".

Communication within business is now accomplished in a large measure through the use of manuals which set forth the boundaries of responsibility; define policy; inform as to methods and aid generally in the conduct of most successful ventures. The important factors in setting up manuals are:

a. Authority for Development of a System
b. The Purpose of a Manual System
c. The Types of Manuals Required
d. The Methods of Controlling a System
e. Methods of Preparation of Manuals and Contents

The authority and responsibility for the development of proper intra-company communication rests with top management, specifically with the executive officer, be he the president of the corporation, the executive vice-president, or, in the case of a small closely controlled venture, the "Boss".

In corporate operation, it is common practice to place the responsibility for the publication of company policy upon either the president or the secretary. It is normal,

MR. HULEN, of the Trenton Retirement Service, San Francisco, is a member of the San Francisco Chapter, SPA.

therefore, to assume that procedures bearing upon policy matters would come from one of the corporate officers. Procedures bearing upon the keeping of records might, depending upon their character, originate in any department; in matters having a bearing upon financial accounts, however, the responsibility is that of the controller. Should there be no controller, as in some smaller organizations, the function would be that of the treasurer or possibly the chief accountant. Procedures having to do with production, sales or purchasing we would expect to originate in the respective department or division and carry the approval of the highest directive head thereof.

Since the approval function is a responsibility of top management, it is deemed reasonable to recommend that the responsibility for final drafting, recording, numbering, producing and issuing of all procedures be made that of one or more people working directly for an executive vice-president or the secretary of the corporation. In organizations of small to medium size, where relatively simple manuals will suffice, the function may be assigned to the controller, chief accountant or office manager, depending upon circumstances. In no event, however, should the necessity for top level approval be overlooked. A manual system is a tool of enlightened management but the stature of any system is measured by the level of approval required to establish a new procedure or abolish an old one. When issued by the executive officer, the procedures apply to all employees; when issued by a subordinate, his equals may take exception to the instructions and confusion will result. Make no mistake, one of the most important components in the success of any effort to install systems and procedures and maintain a manual system is the support given to the idea by the high command.

Manifold Purposes

The purpose of a manual system is to aid management. Oversimplification, you say? Charge admitted. Well, what are the purposes of a manual system? There are several. The purposes of a manual system are manifold and the following ten points are offered to support the contention that the purpose of a manual system is to aid management. There is no intention to convey the thought that these points are offered in the order of their importance, because in changing circumstances their relative importance will differ, even in the same organization.

1. A separate part, or an entire manual volume, may be used to record the company structure and define the responsibilities, functions, locations and administration of its various elements.
2. A separate volume may be required to set forth company policy. This volume could contain, conceivably, details of the corporation's attitude toward public relations, employee relations, customers, suppliers, railroads and other common carriers, with an explanation of management's understanding of the company's obligation to the general public in the conduct of its business.
3. One or more volumes would be devoted to uniform procedures and outline the requirements for satisfactory performance.
4. Volumes may be prepared containing instructions regarding the handling of problems common to all segments of the organization.
5. A ready reference list of all forms may be provided containing an explanation of their use and distribution.
6. Technical manuals may be prepared as an operating aid to any or all segments of the organization.
7. Standard Practice Instructions may be prepared covering individual jobs down to the lowest level of requirement.

The following are benefits to be derived from the whole manual system:

8. It will serve as a reference library for management guidance on normal operational problems.
9. It will serve as a reference base in the development of decisions regarding new or unusual problems.
10. It will serve as a training aid.

Manual types may be described generally as departmental, company-wide or general purpose manuals and standard practice instructions. Informative booklets fall into a distinct sub-class.

1. Departmental manuals fall into two separate classes; those which deal with the responsibilities of a particular department in a particular location—having a geographical limitation, and those which are functional in character, describing work performed by one department but affecting others, such as the claims or traffic departments.
2. Company-wide or general manuals such as that covering policy and purpose.
3. Standard Practice Instructions fall into two classes. The first describes the work done by a group or in a particular position and are normally termed "Job Instructions". The second describes a particular function widely assigned among company units, such as handling personnel, safety program or suggestion system.
4. Informative booklets or manuals of the loose-leaf variety come first. These may be: a, Forms list and copies. b. List of expendable supplies available from central source.

Control of a manual system is very important; it is as important as the support of top management, for the lack of either will spell ruin to the best system. We

stated earlier that the final approval of a procedure should rest with an executive vice-president or the secretary of the corporation. The control of manuals and contents should rest there, also, for it is only by maintaining iron-clad control that a manual system may be managed successfully.

Methods of control vary, of course, with the size and activity of the project. In a small to medium sized organization the problem will be less than in one of wide geographic distribution and varied activity. Control falls into three phases: (1) control of the contents of the manuals as originally approved and issued, (2) control of issued volumes as to their destination and use, and (3) control of revisions and additions.

The following are the most common content-controlling devices:

a. Numeric designation of manuals with pages in each numbered from one up.
b. Mnemonic designations of both manuals and pages
c. Functional designation of manuals with numeric page control
d. Designation by department or area
e. In the case of accounting manuals, control of contents by account number.

Typical of the first approach would be a group of manuals numbered as follows:

1. Policy
2. Administrative Management
3. Financial Management
4. Employee Relations
5. Public Relations
6. Purchasing
7. Factory Management
8. Industrial Engineering
9. Research
10. Sales Management

The most commonly used method is a combination of functional and departmental designation of manuals, with numeric page control.

Control of manual issuance would depend upon company policy. In most cases, however, the width of distribution of manuals would be governed by the extent to which they contain detailed instructions applicable to low level positions. If the system provides for the preparations of procedures below the department level, provision would naturally be made to distribute either part or whole volumes within the departments. Control should be extended to the department level, at least, to avoid loss of material due to labor turnover. Use of manuals within the department should be the department supervisor's responsibility.

Control of revisions and additions may be effected through the stated policy requiring all changes to be issued by the manual control group, after, of course, appropriate approval by higher authority. A clearly understood methods of effecting changes and additions is essential to success. Changes begin with the first recommendation regarding the need. These recommendations are made, in many cases, by a subordinate in a departmental location. Normal corporate practice would require that the recommendation be presented to higher authority until it is either returned to its originator as undesirable or presented to the manual control group or the systems and procedure staff for consideration as the basis for amendment of an existing procedure. After study and report by the designated specialists, whoever they may be, the suggestion may result in a change in procedure and the issuance of a revised manual page. Unless the impending change is of such importance that it must be made immediately, the revision will be held with others until some appointed time when a general revision of one or more manuals takes place.

No Pattern for Control

No inference has been intended that the control of manuals be vested in the systems and procedure group. Because of differing corporate structures and varying industrial demands, it would not be meaningful to suggest a pattern for the relationship of the systems group to those responsible for manual issuance and control. It may be said, however, without fear of refutation, that systems personnel and industrial engineers may both have a part in the preparation of manual revisions. As stated earlier, manuals affecting a particular department would require the approval of that department before they became subject to final executive approval. It is at this point that great subtlety is required upon the part of those assigned the duty of preparing the final revision or amendment and securing the necessary approvals. Much negotiation may be required before an acceptable solution is found and the change made.

A transmittal letter should accompany all revisions when they are distributed to holders of manuals. The letter should indicate the nature of the change and list the pages attached as well as the pages which are to be declared obsolete. A further protection is recommended in the form of a duplicate of the letter, or a tear-off portion, requiring the signature of the person addressed to be returned to the control section.

As a companion responsibility to the control of manuals comes the control of forms. Procedures are not safe without the dual control of both manuals and forms. If established forms may be altered or discarded at will, the maintenance of established procedures will become a nightmare. It is recommended that forms control be handled in one of two ways: (1) By placing the approval and numbering of forms under the direction of the manual control group, or (2) By placing the personnel

responsible for forms control and those responsible for manual control under the direction of the same executive officer and on the same level in the chain of command.

Essential factors in printing and revising manuals are:

1. Binders, booklets and folders.
2. Duplicating methods
3. Standard forms
4. Writing style
5. Developing revisions

The subject of housing the manuals may be approached from several different directions. Beginning with a small organization, we suggest the use of cheap tab stock, acco fastened, binders, until the volume of contents has grown to a point where at least a one inch ring binder is required. Most corporations develop an approach to this problem in keeping with their needs and size.

The preparation of booklets is attended by the need for several decisions. The choice of paper, form of type, layout, number and type of illustrations, colors of paper and ink and the choice of cover stock all must be decided during or after the preparation of the text. The text will be a factor in the determination of size, type and method of presentation A booklet describing employee benefit plans will differ materially from one describing a safety program, which, in turn, will vary from one intended to be used in a training program.

Duplicating methods used in the production of manual contents should vary with the volume of production and the limitations dictated by economy, where that is a factor. Where only a small number of copies are required a typewriter may be used to produce them. As the demand for copies increases, the next natural step would be to an offset process or spirit duplicator, probably to a mimeograph and then to a multilith process. The point to keep in mind at all times, however, is that no matter how sound a procedure may be, it must be read and understood before it will be used. Most people who have occasion to develop or control manuals have a good understanding of printing processes, both direct and offset, they like the feel of rag content paper, they appreciate good type form and they are sensitive regarding good proportion on the printed page. Too idealistic? Possibly, but this knowledge and these qualities make the job of managing manual preparation a pleasant task.

All this recommended knowledge of printing and binding is of little use unless we have a well written text upon which to build. Mature corporations, and some smaller organizations, usually develop a personal style of presentation of bulletins, memoranda, intra-company correspondence and advertising. Part of this company style is the method they use in the preparation of manual content. Bulletins, memoranda, correspondence and advertising are not all written alike. One important requirement of success in writing procedures comes from a bit of old army advice about the preparation of an army order: "An Army Order shall be so written that a fool *will not* and a rogue *cannot* misunderstand." Straightforward simplicity and a simple narrative make for easy reading. Regard what the words imply, as well as what they actually mean, in all of your writing. The indentation and numbering of paragraphs, headings, the use of capitals—all of these are important.

The matter of standard forms for the presentation of procedures is subject to many interpretations. It is not uncommon to pick up a procedure manual, well identified, and turn to the first or the hundredth page and find the heading "Standard Procedure", followed by a number, a page number, an effective date, an issue date and data regarding the procedure which it supersedes. The important part of the manual page is the new or changed procedure, yet it takes second place to the page identity. Would it not be more practical to place all of the necessary numbers, dates, etc. at the bottom of the page in small type? If the manual program has passed the most elementary stage, division heads and supervisors must know that it contains the rules of conduct and that failure to conform may have unpleasant consequences.

Spell Out Revision Method

If the procedures or manual contents are out of line with the facts, or in need of revision, a simple memo started through the chain of command will ultimately result in correction or amendment. If doubt exists regarding how to revise or amend a procedure, the method should be spelled out in the first book and chapter of the procedures themselves. Here again, various schools of thought exist regarding methods of change. Some prefer to have all suggestions routed to the executive officer who may turn them over to the manual group with instructions to secure opinions from division heads through the medium of a bulletin or a letter of request, all of which may be summarized for his decision. Others provide a screening committee, or a series of committees, spread departmentally, to first approve or disapprove a recommendation for change, before it is presented to the chief executive for consideration. Different industries develop different approaches, each in consideration of the methods of operation and the form of organization in effect, so no standard practice may be recommended. The important thing is to give the chosen method of revision wide publicity. Explain the method to all who may find it necessary or desirable to use it.

Throughout this paper I have tried to convey the thought that the purpose of any manual system is to make communications easier for management. To accomplish this objective, management must accept responsibility for the development and maintenance of

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QUESTION:

Should the systems man be held accountable for complete installation of procedures which he develops, proposes and obtains approval?

Editor's note: ***The affirmative stand on this question follows. Is there a reader who would like to argue negatively for publication in a future issue of the QUARTERLY?***

By F. L. Stamberg, Vick Chemical Co.

My affirmative stand on this question is based on the assumption that an installation is complete when a full cycle of the subject operation has been performed successfully by the affected personnel. This need not imply supervision during the full cycle. For example, the installation of a procedure consisting of weekly tabulations and monthly reports might require the systems man's supervision during the first and second week's tabulations, and his return at month-end to supervise the issuance of reports. It is also assumed that all problems arising after the initial cycle, fall in a new assignment category.

With these assumptions in mind, four major reasons are listed below stating why the systems man should be held accountable for the installation of his procedures.

(1) *He knows the procedures better than anyone else.* It is unusual when a procedure evolves from the proposed to the installed stage without some unforseen problem causing a change. An antagonistic department head supervising the installation might ignore the problem. A cooperative department head might adjust for it improperly and cause further problems in his own or other departments. The systems man, having developed the procedure, can anticipate the overall effect of any change and is better able to handle interdepartmental coordination.

(2) *He is free from routine and can devote full time to the installation.* The entree to most assignments is based on the systems man's ability to spend full time studying a problem while the department head and his people carry on with routine. Conversely, all routine other than that which has been changed must continue during the installation. Therefore, if time was not available to the department head for problem analysis, it can not be available for installation of change.

(3) *He is enthusiastic about his procedures and can instill enthusiasm in those who carry them out.* Only a cooperative department head can do this as well as the systems man. An antagonistic department head will, at best, create an indifferent attitude among his employees. The systems man can overcome this by using praise when justified and by explaining why the change is being made and how it will benefit everyone.

(4) *It enables Management to pinpoint responsibility if the installation should fail.* One of the axioms of good organization is that there be no shared responsibility. If a new procedure fails under the department head's supervision, he blames the procedure; the systems man blames poor installation. And, there is probably merit in both opinions. Since a procedure can rarely be sabotaged under the systems man's supervision, he alone must be held accountable for its failure when he directs the installation. Obviously, this responsibility shifts to the department head when the installation is complete.

In conclusion, it seems illogical for the systems man to spend a great deal of time and effort developing and selling a procedure, only to risk its failure through poor installation by someone else.

Book Reviews

(Please order books directly from publisher)

Communication in Management

by Charles E. Redfield 1953. The University of Chicago Press Chicago 37. 290 pp. $2.75

Reviewed by Thomas Ferrara, Merrill Lynch, Pierce, Fenner & Beane

This book is intended by the author to assist in remedying a regrettable situation which he feels now exists, wherein our ability to make intelligent use of communication facilities has failed to keep pace with developments in the facilities themselves and with the increasing complexity of the modern industrial system.

The book is divided into five parts. The first one deals with the place and function in industry of Administrative Communication—"the combination of social communication and administration"—and with a general discussion of the guiding principles by which it is governed.

Part II deals with the first of the three types of internal communication within the pyramidal company structure—Communication Downward and Outward—the giving of orders. The author points out that, for orders to be effective, the order-giver must balance administrative techniques with sociological and psychological factors—i.e., the impact of the order on the person receiving it must be taken into consideration when the order is formulated. The author discusses the various techniques of giving orders and instructions, the relative merits of verbal and written instructions and the purpose to which each should be put. He explains the use of operation manuals and handbooks, and what they should contain. He also sets forth some general suggestions for planning the most effective use of these tools.

Communications Upward

Part III treats the process of Communication Upward and Inward whereby the executive is provided with information about the organization which he must have if he is to issue effective orders. Typical instruments for such information are administrative reports, suggestion systems and opinion polls.

In Part IV the author stresses the importance of the third type of internal communication which he calls Horizontal Communication. This is typified by the clearance, review and conference process.

The final section discusses the growing realization of the importance of administrative communications and the need for increased understanding by key personnel. Several new approaches to the problems of organizational structure, decentralization and delegation of authority are discussed and evaluated.

The writer concludes that . . . "when channels of communications are shortened and simplified, and when supervision is strengthened—with communication being made a part of every job—it is easier to bridge the gap from top to bottom. Better choices can be made from among the communication media now available, new ones can be developed, and the manner of using each of them can be improved. If these things are done, we may look for improvements in many phases of administration, not simply in communication alone."

The bibliographies which follow the chapters serve as excellent general grounding in the subjects covered.

The book will, as John McCaffrey says in the Foreword, repay the reader with "a sense of direction, a knowledge of the past and a view into the probable future of business communication."

Accounting Systems—Design and Installation

by J. Brooks Heckert and Harry D. Kerrigan. The Ronald Press, New York, 2nd edition, 1953. 663 pp. $7

Reviewed by Richard Neumaier, Systems Consultant, Philadelphia, Member Keystone Chapter SPA

The fact that the authors of this book are college professors rather than business or professional men might lead one to expect the book to be a text in accounting theory. It is therefore the more surprising to find an all-too-rare approach to the accounting function as an integral part of the overall industrial process rather than as isolated and autonomous activity. This, coupled with the fact that this is a book about systems and procedures considered as a field of accounting makes it especially interesting to SPA members. The book presents an extensive treatment of the purpose, organization, methods, contents, and techniques of systems work in a purely accounting context. The authors contend that systems and procedures work is the "recognized responsibility of the company controller."

The book is divided into five sections dealing with two major and three minor topics. The two major topics are Accounting Systems and Accounting Procedures. The minor sections cover ledger design, punched card accounting, and special systems problems including forms design and procedure manuals. There is also a very useful appendix in seven sections which include typical charts of accounts for different types of companies and

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Tabulating on a Service Basis

by Robert L. Moad

WHY DOES tabulating on a service basis occupy an important position in business today?

Various changing conditions in industry: centralization, de-centralization, labor markets, etc., have combined with tax conditions to place all types of service organizations in a much more important position during the last ten years than they have ever occupied before.

With these new conditions added to already heavy seasonal and other peak load or temporary problems, the Service Bureau in tabulating came of age, so to speak, as something other than a sales tool for equipment.

With the entry of the independent service organizations into the tabulating field, an entirely new approach to accounting and statistical problems began to develop. The service organization, with nothing to sell but service, is constantly seeking to improve its product. The list of applications is constantly growing. New equipment is becoming available which opens up entirely new fields.

Industry has found that under present-day conditions, faster, more factual and accurate figures mean dollars and cents saved.

Probably 50% of the business done by the tabulating service organization is with the present user of punched card equipment who has found it much to his advantage to maintain sufficient personnel and equipment for normal operation and planned expansion, and eliminating the cost of overtime, stand-by equipment, and the general disruption of normal routine during peak periods, or to handle requests from management for special reports, etc. Some have found that an entire application handled on an outside service basis could be scheduled to parallel his own operation, and the combined result permit a reporting schedule which would be impossible otherwise, except at a prohibitive cost.

The service organizations are widely used to advantage by the potential machine customer, to test his procedures and train his personnel, during the period required for delivery of his equipment. In the most carefully thought out operation, there will be difficulties of an un-anticipated nature which when solved, one at a time, and controls and checks established will ease the transition from a manual to a mechanized basis.

Surprisingly enough many organizations who have never investigated tabulating carefully, as a possible solution to their problems, have formed some rather definite conclusions as to its place in business. Probably the last of these convictions to be "laid to rest" is that the size of the organization has a definite bearing on its ability to afford tabulating.

In its attempt to serve you, the service organization has done much to prove that many apparently small operations lend themselves so readily to the application of punched cards either in whole or in part, that they are not only economical but through the application of modern electronic equipment, they reveal facts as a by-product that were previously available only to an organization large enough to maintain a staff technically trained to assemble them.

It has been our experience that neither the size of the organization nor the volume of the work is a very accurate indication as to whether or not we can assist them on a service basis.

If you were to visit the average tabulating service organization, you would be likely to see sales analyses of all sizes, with all types of requirements, from the simplest to the most complex; payroll and labor dis-

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MR. MOAD is a vice-president of Workman Tabulating Service, Inc., Los Angeles,

tributions for organizations employing 50 to 500 employees; market research jobs involving 100 to 1000 questionnaires; and electronic computing being performed on a handful of cards for one client, and followed immediately by another involving thousands of cards. Each of these jobs has proven itself to be good business practice, and done on a recurring basis.

Your service organization cannot afford to be identified with a bad job from any standpoint. It stands ready to serve you with qualified technical advice, assistance on procedures and will furnish cost estimates and time schedules with which to make a decision. The tabulating service bureau must be well equipped with the most modern of equipment, able to expand its operations to handle your problems on short notice.

Since the service organization leases its equipment in the same manner as any other user, and as the business is conducted for profit, its charges are based upon a standard hourly rate which is built up of the equipment cost, personnel cost, cost of space, overhead and profit factor, and any other cost incidental to the operation of a business.

Know What to Expect

Based upon previous experiences on all types of work from all types of documents over a long period of time, the service organization knows approximately what can be expected in the way of production under a given set of circumstances.

By the process of setting up a procedure to handle your job, securing necessary data on volume, and checking with you to determine that such a procedure will give you the desired result, the representative of the service organization is able to quickly estimate cost and time schedules.

Since many of the service agencies are used by organizations who are prime contractors in the defense effort, their premises are covered by security regulations and are regularly inspected. If they provide delivery and pick-up service, it is equipped to transport source records in a fire-proof safe day or night, and they are never further away than your telephone, in some cases 24 hours a day.

I would like to mention a few of the many jobs which have been or are being handled at the present time, on an outside service basis.

Two large manufacturing organizations in the Chicago area, each of whom had ordered tabulating equipment to handle accounting and reporting, used an outside service organization to set up and operate complete procedures on payroll, standard costs, labor distribution, budgets, invoicing, accounts receivable, accounts payable, manufacturing control, production control, sales analysis, and commission statements. Upon receipt and installation of equipment, the operation was transferred to their own premises with clean-cut procedures and personnel trained to handle.

A large midwestern university handled a three year fund-raising program on an outside service basis at a cost of from $100,000 to $120,000. This operation included mail solicitation, subsequent billing and application of cash received.

A Chicago insurance firm just entering the casualty insurance field requested an outside tabulation service to work with their auditing firm, starting with the design of the daily report, to facilitate reporting required by the state insurance board as well as information required for internal operations.

One of the largest auditing firms in the midwest has worked out a standard audit procedure for loan agencies and handles complete audits from all over the midwest and southwest on a service basis in Chicago.

A large health and accident insurance company, selling group insurance in the midwest, handles all their accounting, billing, cash, claims and claim statistics on an outside service basis. A small, highly efficient, mail order operation in the Los Angeles area has worked with a service organization to develop a method of daily reporting on sales, purchases, to date sales, and purchase requirements that is both unique and economical, and permits buying on a basis that was formerly impossible.

There are many, many more, but I believe the above is representative of what the service organizations are ready and able to do. **s/p/a**

Don't develop a system around the *unique* performance of one individual. Create your system on the expectation of only normal abilities.

Don't try a radical systems plan on any bigger scale than you can help, before proving it. Try it out on a small scale before you go "whole hog" with it.

Don't drop a new system into the line operation without providing for *careful guidance.* Nurse a new system along—Give the details your personal attention. Smooth out the inevitable minor kinks. If you don't do this, there is a good chance that your new system, even though basically sound, will fail.

Management cannot afford many systems failures, and you are asking for a failure, if you experiment with everything at once.

Don't grab credit. **Not only give all the credit that is due for help that you receive, but give credit *beyond* that which is due. If everybody who has to operate the system is against it, even your boss's backing may not prevail. The quickest way to get people on your side is to give them credit for ideas.**

The Evaluation of Systems and Procedures Functions

by D. T. Merritt, Jr.

THE GLENN L. MARTIN Company manufactures aircraft, missiles and weapon systems which are sold almost exclusively to agencies of the Federal Government. There are two characteristics peculiar to this business which affect systems and procedures. The first of these is that, due to the nature of our product, we are subject to continual changes in design, methods, procedures, etc. The second characteristic is that, due to the nature of our customer, the Federal Government, we are subject to the regulations and requirements pertaining to organization, procedures and methods of the many agencies—such as the Air Force, Navy, Atomic Energy Commission and Signal Corps—with which we do business.

The functions of the Audit and Procedures Department fall into six major categories:

1. Company policies
2. Inter-departmental procedures
3. Forms Control
4. Systems equipment control
5. Systems and methods studies
6. Audits—financial, systems, departmental and subcontractors.

We evaluate the performance of these functions on three levels:

1. The evaluation of individual projects.
2. The evaluation of the department's functions internally.
3. The evaluation of the department's functions by higher management.

Concerning company policies, it is our responsibility to develop policies and coordinate their approval by the officers of the company. Policies are the guiding principles that are necessary to the accomplishment of its objectives. We consider policy matters those things which affect more than one division of the Company and which cannot be established at the departmental level. In evaluating each individual policy, consideration is given to all factors that might be affected, such as employee, community and customer relations; increased or decreased costs; and applicable laws and regulations of the local and Federal governments. Although all policies are designed ultimately to improve the financial position of the Company, emphasis is not placed on specific savings in the consideration of policies.

In inter-departmental procedures we include those matters that affect the relationships between two or more departments. Our procedures do not include instructions or intra-departmental procedures that are confined within a single department. Procedures are authorized at the departmental level by agreement between ourselves and the departments affected. To distinguish between this function of inter-departmental procedures and that of systems and methods studies, the procedures functions are identified as the recording and maintenance of the written record of our company's systems. The evaluation of a particular procedure is based on consideration of such factors as conformance to company policies, harmony with the organization functions, adequacy of internal control, and the incorporation of the improvements resulting from our systems and methods studies.

Forms control consists of three basic responsibilities: providing a consulting service to other departments of the Company, the design of forms as related to systems and procedures, and the re-design of forms by analysis of the physical and functional aspects. The evaluation of forms that are part of the development of systems is accomplished in the evaluation of the system itself. The evaluation of forms as distinct from systems development is

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MR. MERRITT was a member of a panel discussion on the subject conducted by the Keystone Chapter of SPA earlier this year. His article is based on his comments on that occasion.

based on an analysis of the savings to be effected as a result of the use of the forms.

Systems equipment control consists of the review and appraisal of requests for new systems machinery and equipment and the keeping abreast of developments in the field of systems machinery and equipment. We do not have an individual assigned to carry out this particular function: it is a function common to the department as a whole and we maintain a central file of equipment information. The control of systems machinery and equipment leads to the establishment of new projects for systems and methods studies. The evaluation of proposals for new systems machinery and equipment is part of the evaluation of systems and methods studies.

Financial, systems and departmental audits are conducted primarily to determine compliance with company policies and standard procedures and to appraise the adequacy of internal controls. Such audits may lead to systems studies or bring to light the need for changes in our policies and procedures. The audits of subcontractors' records are related to the types of contracts which we negotiate with our subcontractors and are generally concerned with costs under price-redetermination and cost-plus-fixed-fee contracts, and claims resulting from the termination of subcontracts. We do not attempt to evaluate this activity in terms of dollars and cents savings.

Cost Reduction Emphasis

Recommendations or proposals resulting from systems and methods studies are always based on detailed analyses of all factors. The primary emphasis is on cost reduction. We ask that reports pertaining to systems and methods studies be written on the results already accomplished rather than on proposals or recommendations. It is our general practice on extensive surveys or studies to put into effect each item for improvement as we come to it rather than to wait until we could prepare and publish a lengthy report formalizing all of our recommendations and savings. We look to the department head involved to approve our recommendations and to place them into effect after he has approved them. Most of our reports consist of informal memoranda reporting the installation or adoption of changes which have already been made by the department head. Some of the objections to formal reports are:

1. Disagreement on one item in a proposal could hold up all of the recommendations.
2. Lengthy reports take longer to prepare, longer to review, longer to get approved.
3. Formal reports, accompanied by the tendency to pass around a few extra copies, give the impression that you are working for yourself rather than the department head.
4. No matter how carefully a report is worded, it will frequently be judged as a criticism of existing systems and methods and of the department heads involved.

In some areas, of course, formal reports are prepared such as:

1. When capital expenditures are involved and a formal approval is required.
2. When agreement between departments affected has not been reached and approval on the divisional level is required.
3. When studies have been made for and reports requested by top management.

Some Savings Can't Be Priced

Although we believe that savings which will result from systems and methods studies should be determined whenever feasible, we do not believe in trying to put dollars and cents on intangible factors and hidden elements. We recognize that some systems and methods are going to cost money rather than result in savings. Some studies will result in recommendations against change—that the status quo is satisfactory. We particularly do not attempt to place dollar savings on small increments of clerical activities. Since all factors have been considered in making the decision to make a change in a system we depend on the fact that the summation of many small improvements in clerical operations will produce the savings in the long run.

I have tried to outline the fact that each project—whether it be policy, procedure, or systems and methods study—is evaluated on an individual basis at the time the project is completed. Likewise, the evaluation of the department internally is on an individual basis, being accomplished as each project reaches its completion and not on the basis of a formal periodic report. With respect to the evaluation of the department's functions by the Controller, to whom the department reports, a copy of each report or study is sent to the Controller who is thereby continually and currently informed as to the influence of the department's undertakings on over-all company activities. The demand for the department's services and the number of complaints, or the lack of complaints, concerning our services also provide him with additional performance information.

We do not believe that we should prepare or issue an annual report as the basis for evaluating our department's activities. We do not feel that it is necessary to justify our work and our jobs on a dollar savings basis any more than any other department; certainly not any more than any other staff department. Our management does not see the need for such a report, nor does it encourage this type of report from any department.

I am sure you understand that, when I say we do not believe in an annual report, I am speaking of the usual type of report consisting of various statistics of how many of this and that were done during the year and how many dollars of savings resulted from our activities, in other words, how much we are worth to the company. Such reports usually show how much the department saved for somebody else's department and do not necessarily reflect the effectiveness with which the assigned functions were performed.

If all departments prepare an annual report, then I feel the systems and procedures department should prepare a report also. I feel that such a report should be more along the lines of a review of the assigned functions of the department, the objectives of the department as related to over-all company progress, what progress has been made toward the accomplishment of the objectives and what are the plans or programs for the future. This last item, I feel, should be the most important part of an annual report. To summarize, we see no reason why systems and procedures work is more subject to defensive justification in terms of dollars and cents than any other activity of the company. We do not think that this activity is any different or any less necessary than any other activity. **s/p/a**

Manuals for Business

(Continued from Page 15)

such a system. Executive action must establish authority for the preparation, recording and revision of both manuals and contents. The actual accomplishment of this task should be placed in the hands of a subtle genius who possesses the characteristics and abilities of an author, an engineer, an accountant, a printer, a politician, a statesman, a psychiatrist and an undertaker. An author because he must write so he shall be read and understood; an engineer because he must possess and understand a technical mind; an accountant because he must understand the need for accuracy of detail; a printer because he must understand design, preparation and presentation of the printed word; a politician because he must meet and understand strange companions, and keep his fences mended; a statesman because he must meet and negotiate with "Princes of the Realm" and "Little Kings"; a psychiatrist because he must understand the unspoken word and fathom the whimsy of the human mind, and an undertaker because he must officiate at the burial or cremation of many good hopes and fond desires. He must be, indeed, a subtle genius, and yet, a man. **s/p/a**

Corporate Politics

(Continued from Page 11)

tion are, what his religious attitudes are, what his background and environment were, and so on. And even here there are simple fundamental approaches to make this road of study and analysis possible and practical.

A few leaders of our own generation have cut a path toward this field of essential understanding in modern mass business. There are not many such men but there are some. There is a road to this basic knowledge if we would but devote ourselves to attaining it.

The conduct of men, of yourselves, for example, man's activity or lack of it, man's willingness and/or ability, or lack of both to cooperate, his observance of human conventions which we know as the moral code or his absolute disregard for it, depends for the most part on four factors: (1) his state of health; (2) his training and experience, both academic and practical; (3) his heredity and environment, and (4) his wants and the urge to satisfy them. A workable understanding of all four of these factors is readily obtainable to those who would attain it, to those whose present wants include the desire for this understanding. Success in full measure has as its price your individual drive to study these matters carefully. You can do it if you have the will to do it. **s/p/a**

Book Reviews

(Continued from Page 17)

a listing by industry of the sources of published charts and manuals of accounts.

Of particular value are the many chapters devoted to exposition of the procedures which make up the accounting function, including not only such things as Accounts Receivable and Billing but also related procedures like Manufacturing Cost Control, Sales Analysis and Inventory Accounting. The material has been brought up to date and coverage is thorough. While this book will not answer every relevant question, it does survey a great many approaches to the design and improvement of accounting systems and points out prominent features of each method and machine application. The book is copiously illustrated with 348 charts, photographs and sample forms as well as with textual references to actual practices in service and commercial as well as manufacturing companies.

This book is an excellent basic text in accounting practices for systems personnel, both new and experienced. It also has a definite place in any organization desiring to give personnel an accounting orientation or an analysis-of-alternatives approach to the solution of accounting problems.

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